SUSTAINABLE WATER AND SANITATION IN AFRICA (SUWASA)

REFORM WORK PLAN: ZAMBIA -Supporting Economic Regulation of Urban Water Services in Zambia

JULY 2012

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ACRONYMS

EGAT Bureau of Economic Growth, Agriculture and Trade

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

JICA Japan International Cooperation Agency
LWSC Lusaka Water and Sewerage Company

M&E Monitoring and Evaluation

MLGH Ministry of Local Government and Housing

MWEM Ministry of Water, Energy and Mines

NRW Non-Revenue Water

NWASCO National Water and Sanitation Council

PMP Performance Management Plan

PPP Public Private Partnerships

RWP Reform Work Plan

SIP Small Investment Program (SUWASA)

SOW Statement of Work

SUWASA Sustainable Water and Sanitation in Africa

USAID United States Agency for International Development

WASH Water, Sanitation, and Hygiene WSS Water and Sanitation Services

CUs Commercially Viable Water Utilities

ZESCO Zambia Electricity Supply Corporation

MCA Millennium Challenge Account

MCC Millennium Challenge Corporation

OECD Organization for Economic Co-operation and Development

PROJECT SUMMARY SHEET

Project Title	Supporting economic regulation of urban water services in Zambia
Country	Zambia
Specific Location	Nation-wide
Goal/Overall Objective	The overall goal of the SUWASA Zambia initiative is to support the regulator (NWASCO) in meeting one of its key objectives, i.e. ensuring sustainability through promotion of cost recovery of the urban water sector.
Tasks	Determine the optimum cost of water service
	2. Design a tariff model
	3. Develop corporate governance guidelines.
Project Duration	12 months
Approximate Commencement Date	August 2012
Prime Implementing Organization	SUWASA, partly through subcontracts/individual consultants.
Implementing Partners	MCC, USAID/Zambia, MCA-Zambia, NWASCO; MLGH

1.0 CONTEXT OF THE PROJECT

1.1 OVERVIEW OF THE SECTOR

1.1.1 Country and Sector Issues

Zambia is considered to be highly urbanized compared to other African countries as almost 40% of its population of approximately 13 million people lives in urban areas. At independence in

1964, Zambia was a middle income economy, largely dependent on copper. Until the mid-1980's, most basic services were highly subsidized as a result of the solid economy and strong social policies. Water services in urban areas were almost a "free" service with very limited metering, no control on consumption, and maintenance was funded by the treasury rather than from user fees. A culture of high expectations for good services with low payment therefore emerged. However, from the late 1970s through to the 1990s Zambia's economic development was adversely affected by falling copper prices, limited diversification of the economy, poor macro-economic management, and frequent fiscal crises. . Absolute poverty increased and per capita income and other human development indicators fell in the 1990s. Basic service delivery deteriorated. Water supply coverage

estimates in 1990 were 73% while estimates of coverage for 2010 were around 61%.

A sweeping program of economic and social reforms leading to the privatization and deregulation across many sectors was introduced in the early 1990s. At the same time in the 2002-2004 Poverty Reduction Structural Program (PRSP), the Government outlined an ambitious plan for Zambia's economic growth with a strong sectoral focus. One of the primary areas of intervention in the PRSP was the delivery of social services primarily in education and health. The water and sanitation sector was considered at the forefront of the 'delivery of basic services' agenda to improve public health and wellbeing as a significant number of preventable diseases in Zambia are related to poor water supply and sanitation.

Before the reforms, urban water systems were failing, were not longer sustainable without major government financial transfers. The sector suffered from lack of a comprehensive and clear sector policy and strategy to guide the provision of services, lack of a legislative and regulatory framework, unclear roles and responsibilities of institutions leading to either gaps or duplication of efforts, low investment in the sector, low cost recovery [being a result of low tariffs and low billing and collection ratios], overstaffing with people not adequately qualified e.t.c.

In response to these challenges, the Zambian Government in the early 1990's, began a process of policy, institutional and legal reform of the water and sanitation sector resulting in the development and adoption of the National Water Policy (1994). The water sector reforms were implemented based on seven sector principles one of which promoted the establishment of a clear regulatory framework separate from executive functions within the water supply and sanitation (WSS) sector.

One of the results of the water sector reforms was the establishment of an autonomous water regulatory agency, the National Water Supply and Sanitation Council – (NWASCO), for the

urban water sector under the 1997 Water Supply and Sanitation Act No. 28. NWASCO was charged with balancing commercial and consumer interests and given the overall responsibility to advise the government and local authorities on matters of: WSS and commercially viable instruments of service delivery, license utilities and other service providers, develop guidelines for WSS provision, set tariffs, and enforce minimum service delivery standards. This groundbreaking regulatory and institutional framework devolved the authority for water provision from the central government to local authorities who were given freedom to decide how the systems should be operated. In particular, local authorities were encouraged to form autonomous water and sanitation Commercial Utilities [CUs] that were expected to be financially self-sufficient with respect to operating and maintenance costs. These utilities were to be singularly or jointly owned by municipalities as shareholders. Though owned by municipalities the CUs are registered under the country's company laws and operate purely on commercial lines. The reforms also led to the separation of water services delivery from water resources management.

While the institutional reforms were achieved, tariff reforms were not immediately adopted. Water tariffs declined in real terms as they did not keep up with an annual inflation rate of around 20% that persisted since 2000. One immediate consequence of low tariffs was the inability of CUs to invest in expansion and to maintain existing systems, further eroding performance and cost recovery. Even with a significant cross subsidy for operational costs, the poor financial position of the CUs resulted in a backlog of deferred maintenance and large technical losses. Non-Revenue Water [NRW] continues to be high and currently stands at an average of 45%. Utilities do not have cash to invest in needed billing and collection systems to improve their commercial viability. Given urban growth rates [2.3% per year]; the number of urban consumers without reliable access to safe water is growing.

Currently, there are 11 CUs operating in Zambia and each covers multiple towns. 90% of the urban and peri-urban population is covered under the services provided by CUs. Some characteristics of the CUs are provided in the following table:

	Commercial utility	No of staff	No. of connections	No of towns served	Total population in service area	Population served
1	Lusaka WSC	819	76,749	4	1,937,630	1,459,918
2	Nkana WSC	476	45,983	3	701,870	633,218
3	Kafubu WSC	773	48,807	3	653,299	564,869
4	Mulonga WSC	309	43,330	3	446,719	403,063
5	Lukanga	190	15,403	6	376,574	247,649
6	Southern WSC	268	31,535	17	339,735	311,440
7	Chambeshi WSC	182	14,288	12	286,493	188,254
8	North Western WSC	88	7,661	7	236,157	172,192
9	Eastern WSC	120	10,316	8	179,124	90,705
10	Western WSC	100	9,257	6	224,379	145,417
11	Luapula WSC	50	2,929	7	177,363	26,700
	Totals	3,375	306,258	76	5,559,343	4,243,425

1.2 REGULATORY FRAMEWORK OF THE SECTOR

As a statutory body, NWASCO has managerial, technical and financial autonomy. The objectives of NWASCO are to ensure that activities under its regulatory jurisdiction are carried out efficiently, to protect the interests of the consumers, the state and regulated companies and

to ensure that regulation is exercised according to the law [the Water Supply and sanitation Act No 28 of 1997]. NWASCO's role is primarily to regulate economic activities of the urban water sector and provide general protection of consumers while not directly regulating the drinking water quality or environmental affairs. NWASCO ensures that urban water services are provided equitably in a financially viable and sustainable manner. The institution promotes good utility management, and approves cost recovery tariffs. One of its key focus areas is to reduce the number of unmetered connections which are more than 50% of all connections.

The establishment of a regulator in Zambia led to reduced direct intervention by the Government and/or the political system in the management of the utilities. The commercialization coupled with the existence of a regulator means that the Government has recognized the need to run urban water services delivery as commercial entities. The utilities are becoming more accountable for what they do. Since establishment in 2000, the regulator has been producing a sector report on an annual basis which also highlights the performance levels of all the utilities. This information is made public through the national media.

1.3 CURRENT SECTOR CHALLENGES

Regulatory Review of Tariff Adjustment Applications

One of the tasks that NWASCO performs is to review and approve tariff applications from the CUs to ensure that the costs of operation are being covered to the greatest extent possible, while balancing this objective with meeting other mandates such as ensuring affordability, quality and equity of water services. In order to perform this task effectively, NWASCO has developed tariff guidelines which provide details to the CUs on information to include in their tariff proposals and the assessment criteria that are used in analyzing their applications.

A challenge NWASCO faced was its difficulty in understanding, for each CU, the optimal cost structure of providing service.. There are numerous operational inefficiencies such as non-revenue water and low revenue collection, which distort the cost structures and cause the cost of WSS service delivery to differ significantly from one CU to another. Without accurate data it is difficult to determine how much it actually costs to produce and supply a cubic meter of water and, furthermore, what a CU should equitably charge as a tariff for the water service. An optimum cost structure for each CU which is therefore necessary and is aimed at cost minimization would help management to influence, monitor and maintain the estimated cost structure. There is a need to develop the accurate information on what it actually costs to produce and deliver water and sanitation services under the current situation, but there is also a need to advice on what efficiencies should be sought in the system and embedded in the tariff structure.

NWASCO faces challenges in responding to requests for tariff adjustments due to various bottlenecks in using the current tariff model. NWASCO's current tariff guidelines reflect transparent principles of recoverable costs, time horizons for reaching cost recovery and incentive systems for utility performance. Since inception NWASCO has used the cost-plus tariff model. While this model has worked reasonably well for more than ten years, NWASCO seeks to assess the appropriateness of the cost plus model and analyze other possible models that could be used for reviewing proposed tariff adjustments. Further, the CUs are generally not highly conversant with the tariff adjustment procedure, especially the need for provision of accurate and well presented information for tariff analysis to be undertaken. NWASCO therefore seeks a tariff model that can easily be understood by the CUs and where all critical factors are appropriately applied, e.g., assumptions to be used in the tariff application including general country economic and other financial factors, operation and maintenance costs, cost of servicing informal settlements, etc.

Corporate Governance

The CUs are established under the local private company legislation - The Companies Act, Chapter 388 of the Laws of Zambia. The Companies Act promotes adherence to good corporate governance which NWASCO also promotes. As limited companies, the companies have the ability to operate according to commercial principles in the best interest of shareholders, the municipalities. This being the case it may not be appropriate to have elected officials be part of the Board of Directors. (elected officials are councilors who are politicians elected by the residents of the city at the same time that they elect the President and members of parliament). The companies have Boards of Directors who oversee the general operations of the company by its management.

Acknowledging that adherence to the principles of corporate governance lie at the core of the successful management of any company, in 2002, NWASCO developed the Guidelines on Corporate Governance. Unfortunately, over the years there has been compromise by the CUs and the shareholders on the adherence to the principles of corporate governance. Some of the reasons cited are that the guidelines are no longer valid as some of the provisions may need clarification or re-visiting. For commercial utilities, non-adherence to good corporate governance can results in poor management of the utility and hence poor service delivery at the expense of the very consumers that have to pay for the service provided by the utilities. This has made it imperative for NWASCO to begin the process of the revision of the Guidelines on Corporate Governance in liaison with all the major stakeholders in the sector, and with precedent in the country, legal guidance and best practice. Some of the issues that need to be addressed include the following:

- i. Present guidelines are outdated, vague and couched in very general terms. For example, the guidelines do not address the need for codes of ethics or guiding principles for governing the boards in their charters.
- ii. Over the years there has been a shift in the process of appointment of board members. There is a need to address this in order to be in line with the requirements of the Companies Act.
- iii. Lack of adequate oversight and direction of performance of managing directors, no defined limits of authority on managing directors and top executives and the commercial water utilities in general by the boards, including compliance with statutory obligations.
- iv. Lack of a formal performance management system applicable to managing directors of CUs and failure by boards to give strategic direction to management.

2.0 DETAILED PROJECT DESCRIPTION

2.1 Goal/Overall Objective

The goal of the SUWASA Zambia initiative is to support the regulator (NWASCO) in implementing an improved approach to tariff adjustment approvals, with increased emphasis on cost recovery and sector efficiency. This will be accomplished through development of improved cost of service data, assessment and recommendation of an appropriate tariff setting methodology, and a model to be used to assess adjustment applications. As a complementary activity, SUWASA will work with NWASCO and the CUs to revise update and improve the corporate governance guidelines as a requirement by the Companies Act. Promotion of good corporate governance of the water utilities in Zambia will enhance their ability to produce good data and sustain a focus on financial sustainability. The specific objectives of the project are:

1. Promote financial and operational efficiency in the provision of urban water services

2. Support the development of improved governance and accountability mechanisms for urban water services

2.2 TASKS

The project will be carried out in accordance with the tasks described below. Section 3 provides a detailed implementation plan.

2.2.1 Inception Period

Two inception reports will be developed for this project. The first inception report period will include the development of a detailed schedule of activities with sub-activities in order to complete the project tasks on the cost of service study and also the tariff model. The decision on which CUs to include in the cost of water study will also be made and presented in this report.

The second inception report will be on the improvement of corporate governance of the CUs. The second report will describe how the assignment on corporate governance will be undertaken.

The inception period will be particularly useful in establishing important collaborative relationships between the project team, and project partners, including NWASCO, USAID/Zambia, MCC and MCA-Zambia. Meetings will be held with at least four CUs, NWASCO and other key stakeholders and a detailed review of available data will be carried out. The first inception report will be provided within 60 days of project start-up and will include: key findings and recommendations on project implementation including an updated work plan with detailed sub-tasks and schedules. The inception reports will also include a monitoring and evaluation plan and recommendations for specific CUs to undergo the optimum cost of water exercise.

2.2.2 Establish Baseline of Optimum Cost Of Water Services

Under this task, SUWASA will support NWASCO in deriving an appropriate cost of water services that can be used as a baseline for CUs when they apply for tariff adjustment. The cost of water services to be determined should have improved efficiency levels in-built. Currently NWASCO uses the cost-plus tariff model as a basis for tariff adjustment approvals. The approach hides numerous inefficiencies by allowing costs to be covered by a tariff whether efficient or not. The approach does not incorporate incentives for efficiency improvements. The cost structure for each utility is different as the operating environments are different. It is therefore necessary to undertake the exercise across a representative set of CUs as determined during the inception period.

This study will estimate an optimum cost structure for each CU which is aimed at promoting cost efficiencies. This will provide management of the CUs and NWASCO a vehicle for ensuring costs that should lead to achieving the cost coverage goal.

2.2.3 Update Tariff setting methodology Model

As stated above, NWASCO has used the cost-plus tariff model. This means that tariff proposals from the CUs used the historical cost structure as the basis for requesting tariff adjustment. While this tariff model has worked reasonably well over for the last ten years, NWASCO seeks to assess the appropriateness of the cost-plus model and analyze other possible models that could be used going forward.

Further, NWASCO seeks to develop a tariff model that is clear to the beneficiaries. All aspects of the reasonable costs should be included and it is necessary that all assumptions to be used in the tariff application – economic and others with respect to financial projections (which vary across CUs) - are clearly understood, including:

A clear understanding of the definition of operation and maintenance costs.

- Understanding of the cost of servicing peri-urban areas and informal settlements.
- Determining the implications of achieving full O&M cost coverage. This is a modeling and policy exercise but based on as close to actual cost of service data as possible.
- The appropriateness of the tariff model with respect to five (partially competing) criteria. During the inception phase it will be determined as to whether all these are policy priorities for the government of Zambia.:
 - i. O&M recovery, to cover prudently-incurred O&M expenses at a minimum.
 - ii. Prospective capital improvements, required for service expansion as well as longterm sustainability.
 - iii. Economic efficiency.
 - iv. Equity, including due consideration to the needs of the poor and disadvantaged groups.
 - v. Affordability, recognizing that modest cross-subsidies among different customer classes may be required to ensure the financial viability of subsidized rates for the first few units of consumption targeted to poor consumers.

2.2.4 Update Corporate Governance Guidelines

Pursuant to its authority under Section 4 of the Water Supply and Sanitation Act, NWASCO has developed various guidelines as part of its regulatory tools. Acknowledging that adherence to the principles of corporate governance lies at the core of the successful management of any company NWASCO developed the Guidelines on Corporate Governance in 2002. Though the guidelines to be developed will be for NWASCO, they are to be used by the commercial utilities and non-adherence to good corporate governance results in poor service delivery at the expense of the very consumers that have to pay for the service provided by the utilities. In today's global economy, the rate of change is phenomenal and the principles of corporate governance continue to evolve, as evidenced by the revision of the King I, II and III Codes of South Africa and the OECD Guidelines on Corporate Governance of State-Owned Enterprises. NWASCO sees a need to update its guidelines, in liaison with all the major stakeholders in the sector, so as to bring them in line with international standards and norms.

The commercial utilities, though owned by municipalities, are duly registered under the Companies Act, Chapter 388 of the Laws of Zambia. This means legally they exist as private and limited companies. They must therefore adhere to the legislation as applied to all such companies and should be separated from the shareholders, the Municipalities. The companies have Boards of Directors who oversee the general operations of the company by its management.

A number of factors have given rise to the need to update the guidelines as some of the provisions are no longer valid. NWASCO seeks to revise the guidelines and also ensure adherence with the principles of corporate governance as the issues of compliance thereto lie from the boards themselves. The exercise should also lead to the development of enforcement procedures for the guidelines. This failure to adhere with the principles of corporate governance has led to compromised management of the utilities which has had an impact on service delivery. For example there have been situations in the recent past where Government appointed politicians to be the Chairpersons of the Boards of Directors –regardless of competences in Board management issues. As a consequence, the customers continue to be subjected to sub-standard service on account of the failure to adhere to these principles

3.0 PROJECT ACTIVITIES

3.1 INCEPTION PERIOD

As stated above, the Inception Period will include development of a detailed schedule of activities with sub-activities in order to meet the two objectives. The first two tasks (optimum cost of water and the design of a tariff model) will be undertaken by one project team while the other component on good corporate governance will be implemented by another team.

3.2 COST OF WATER SERVICES ANALYSIS

Under this task, the project will support the determination of the cost of service for a sample of the 11 CUs to serve various classes of customers (domestic, institutional/government, commercial etc) that would ensure that the CUs would operate as commercially viable utilities and able to meet the water and sanitation demand reliably and reasonably within the service areas.

The following activities will be carried out under this task:

- 1. Review current cost categories for CUs:
 - Data gathering The SUWASA team will gather cost data from the CUs selected during the inception period, which will include Lusaka Water and Sewer company. The amount of data collected will likely be based on availability but, is expected to include cost data submitted in conjunction with tariff adjustments, five years of most recent historical data from each CU, and the current cost budget and year-todate actual from each CU.
 - Compile and compare current cost categories among CUs The team will
 evaluate the cost data for consistency among cost categories for each CU. The
 existing cost categories will be evaluated for completeness and ability to
 successfully track costs in the current regulatory environment.
- 2. Develop Uniform Cost Categories for future use by all CUs:
 - Identify cost category structure Along with stakeholder input, the team will
 develop a set of cost categories that will provide a level of detail to allow for
 successful and accurate tracking of costs in the CUs.
 - Provide definitions for each account Specific definitions for each cost category will be provided to make it easy for the CUs to allocate costs to each specific account.
 - Populate architecture with a system of accounts and account numbers the overall cost category structure will be subdivided into cost accounts and account numbers that will ultimately be implemented by the CUs to track and report costs.
- Achieve consensus and approval from NWASCO of Uniform Cost Categories Once
 the cost categories have been developed and refined, the team will present the results
 to all stakeholders. The team will also provide a recommendation to NWASCO to adopt
 the proposed cost categories as a uniform system of accounts for the purposes of
 regulatory reporting and tariff setting.
- 4. Estimate current and historical costs in each proposed cost category for CUs The team will work with the CUs selected above to allocate current budgetary and cost data into the proposed cost categories. In addition, the historical cost data received will also be incorporated to the greatest extent possible to allow for a trending analysis across the new cost categories

- 5. CU cost analysis utilizing the proposed cost categories Based on the analysis in item four above the team will perform an analysis on the historical and current costs of the selected CUs for each of the cost categories. Such an analysis is expected to include, a review of cost trends over time, identification of normalized data that can be used as a time-based benchmark to evaluate performance and comparison of cost categories across the three CUs.
- Assignment of cost categories to fixed, variable, and mixed costs for CUs The team will identify each sub account of the proposed cost categories as fixed, variable or mixed.
- 7. Construct model to determine the average and marginal costs for CUs The team will develop a model for tracking the cost categories for each CU. The model will be developed in a spreadsheet format that will allow for numerous inputs and variables that affect the cost structure of a utility. Additional flexibility will be designed in the model to simulate how changes over time can potentially affect the cost structure in the future. Among the model's outputs will be:
 - The average and marginal costs curves for the CUs,
 - The per unit (m³) cost of operations and maintenance, capital, other non-operating items.
 - Projections of expected costs of service based on several factors (i.e. inflation, changes in non-revenue water, changes in utilization etc.).
- 8. CU Analysis The team will use the model developed in Item 7 above to perform a cost structure analysis of the selected CUs. All model inputs and variables selection will be based on information received and analyses performed as part of this assignment in addition to input from the CUs. The results of the model will describe the unique cost structure of each CU, the cost of service, and how the current tariff compares to the average and marginal costs.

3.3 Development of a Tariff Model

Review the existing tariff model as follows:

- Undertake an assessment of the appropriateness of the current tariff model with respect to four partially competing criteria cost recovery, economic efficiency, equity and affordability as explained above.
- 2. Analyze the current cost structure across each customer class, distinguishing between operating costs and capital costs (to the extent such disaggregation is feasible).
- 3. Assess the opportunities for consolidating or restructuring the current tariff structure i.e. NWASCO uses the increasing block tariff (IBT). There might be opportunities to use other tariff structures.
- 4. Provide details of consumption profile for each customer class, including how consumption varies with customer characteristics within each customer class.
- Compare the tariff developed under this study versus the existing tariffs in terms of average unit revenues applying to individual consumer groups, given reasonable assumptions on collection rates.
- 6. Establish a criterion for cost structure development after reviewing the various cost categories (stated above) that are used by the CUs.
- 7. Investigate and identify alternative solutions for tariff structure including tariffs for different customers, consumption levels.

- 8. Recommend the appropriate structure and level of tariffs, including consideration of:
 - i. Tariffs that fully recover operating cost and eventually, recover operating cost plus depreciation and return on equity.
 - ii. The level of tariff necessary to promote competitive rates and attract customers for each tariff category.
- 9. Develop a financial equilibrium model for WSS service provision which will determine the mix of the three main sources of financing the sector, namely Tariffs, Taxes and Transfers, (3Ts).
- 10. Develop a tariff model to be used in assessing and approving of tariff applications from the CUs. The tariff model should be robust enough to be used by any utility
- 11. Train inspectorate at NWASCO on the use of the proposed tariff model
- 12. Provide appropriate mechanism for annual tariff adjustments, and the criteria to be used in conducting regular reviews of tariff adjustment mechanism.
- 13. Recommend for each CU the type of computer software and tools used in developing the tariffs and provide training to members of staff of CU personnel who will be responsible for its administration.
- 14. Analyze current corporate governance guidelines.
- 15. In consultation with NWASCO, analyze any gaps to be filled.
- 16. Revise the guidance to fill critical gaps and to update requirements to reflect international standards and norms.
- 17. Conduct workshop in Lusaka to present recommended updates to guidance to key stakeholders.

3.4 CORPORATE GOVERNANCE

Through this activity, SUWASA seeks to support NWASCO in establishing the most appropriate governance structure that clearly defines the roles and relationships between the boards, shareholders and water utility management. The general composition of boards and the procedure for appointing members will also be considered.

Possible activities:

- 1. Review the current corporate governance guidelines and identify any issues or short comings. Also identify reasons for compromise on the application of the current guidelines.
- 2. Develop corporate governance guidelines i.e. composition and appointment procedures for the boards of directors.
- 3. Develop a board charter, code of ethics for board members, and operational guidelines for boards.
- 4. Develop clear roles and responsibilities of the shareholders, boards of directors, management.
- 5. Develop monitoring mechanisms for shareholders over board of directors, board of directors and management.
- 6. Development of a performance agreement between the CUs and board and between shareholders and boards of directors.
- 7. Stakeholder consultation workshops on the guidelines.

8. Capacity building of the shareholders, boards and management from the CUs.

4.0 EXPECTED RESULTS

- Financial and operational efficiency of urban water services improved based on tariffs reflecting operational costs and incentives to reduce inefficiencies.
- Tariff model and adjustment that are transparent to all stakeholders and based on consideration of cost recovery, efficiency, equity, and affordability developed, approved and implemented.
- Governance and accountability of the urban water sector improved.
- Revised corporate governance guidelines developed and implemented.

4.1 INDICATORS FOR MEASURING PERFORMANCE

During preparation of the Inception Report (stated above), SUWASA will work closely with project partners (particularly NWASCO) in finalizing indicators and targets for the project, to be included in the M&E plan as part of the report.

- Number of good practices identified, promoted and adopted.
- Number of new policies, laws, agreements, regulations or investment agreements implemented that promote access to improved water supply (USAID F-indicator).

4.1.1 Table 1: Results Framework

Objective	Activities	Expected Results	Indicators
1. Promote financial and operational efficiency in the provision of urban water services1.	Determine optimum cost of service Undertake cost structure analysis Develop a revised tariff model for water services	Financial and operational efficiency of urban water services improved Tariff model and structure/procedure that promotes cost recovery developed, approved and implemented	% of O&M costs for water supply services covered through customers charges Number of good practices identified, promoted and adopted
2. Support the adoption of improved governance and accountability mechanisms for urban water services2.	Analyze current corporate governance guidelines In consultation with NWASCO/MLGH identify any gaps to be filled Revise the corporate governance guidelines Hold consultation workshop to present and agree with the corporate governance.	Governance and accountability of the urban water sector improved Revised corporate governance guidelines developed and implemented	Number of new policies, laws, agreements regulations or investment agreements implemented that promote access to improved water supply and sanitation (USAID F-indicator) Number of good practices identified, promoted and adopted

5.0 ASSUMPTIONS AND RISKS

- Availability of financial data from the CUs It is very important that financial
 information especially related to the costs of providing the water services is available.
 The data may not be uniformly available and good hence this exercise will only be
 done in a sample of utilities.
- NWASCO and CUs clearly understand the value of determining the optimum cost of water.
- Government and the CUs support the exercise and willing to accept the
 recommendations especially with the resulting recommendations of possible increase
 of tariffs. This will only be the case if the current tariffs are determined to be below
 the actual cost of providing water and sanitation services.

6.0 LINKAGE WITH OTHER Sector development activities

USAID/Zambia has a major WASH in Schools program and is supportive of this activity with NWASCO, the CUs and MCC.

6.1 COMPLEMENTARITY WITH OTHER DEVELOPMENT PARTNERS

USAID through SUWASA will complement a Millennium Challenge Corporation US\$350 million investment project in the water sector and drainage in the Zambian capital Lusaka by supporting the regulator, NWASCO's capacity in tariff setting. The SUWASA project in Zambia will help to ensure that U.S. Government investment in basic infrastructure in Lusaka will be embedded in a favorable and robust regulatory framework and that the population will be subjected to a fair and technically sound tariff regime.

The SUWASA team will work collaboratively with the MCC and MCA office in Lusaka and the USAID Zambia Mission, using their combined resources and experience to sensitize stakeholders across the Zambian water sector and exchange technical information.

In addition to NWASCO, SUWASA will coordinate closely with other government agencies, particularly the Ministry of Local Government and Housing and Ministry of Energy and Water Development in addressing specific regulatory and institutional shortcomings in regulatory oversight and tariff setting.

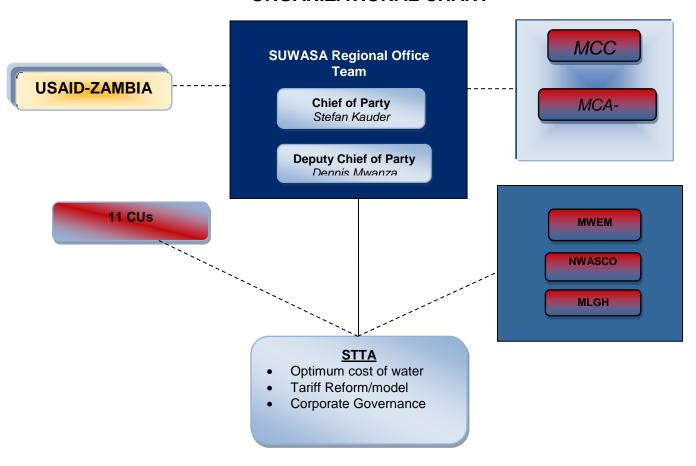
At the time of preparation of this Reform Work Plan, SUWASA has not identified other development partners working with NWASCO that would complement or potentially duplicate this SUWASA intervention; however, should additional partners be identified over the course of implementing the project, we will adjust the work plan as required. Throughout the life of the project, SUWASA will seek opportunities to leverage resources from these partners, e.g., in scheduling and convening workshops, exchanging technical information, etc.

6.2 INSTITUTIONAL ARRANGEMENTS

The two project components can be implemented based on the use of short term technical assistance (STTA). It is not envisaged to have a full fledged SUWASA office in Zambia. However discussions will be held with another Tetra Tech ARD office in Lusaka for possible hosting of consultants when they are in Lusaka. Another alternative will be to request NWASCO—the project implementation partner—to host any consultants that may be visiting Lusaka. Another alternative will be to seek agreement with MCA-Zambia to undertake this role. The final decision will be made during the inception visit in early August 2012.

The project will be supervised from SUWASA Africa Regional Office in Nairobi. SUWASA will work with NWASCO in defining the requirements for consultants including designing SOWs and procurement of the consultants. During the inception period, a decision will be made on the role of the SUWASA Regional Office for reporting results to our partners, overall in-country responsibility for project implementation and representation of the project at strategic meetings with initiative partners, managing the project budget, coordinating and managing consultancy contracts.

ORGANIZATIONAL CHART



MWEM: Ministry of Water, Energy and Mines NWASCO: National Water and Sanitation Council MLGH: Ministry of Local Government and Housing

7.0 MONITORING, EVALUATION AND REPORTING ARRANGEMENTS

7.1 INTERNAL MONITORING AND QUALITY CONTROL

During the inception period, a decision will be made on the role of the Regional Office and NWASCO. One of the issues to be resolved is as to who will be responsible for reporting and documentation on project results, progress against the approved work plan, and routine coordination and liaison functions. The SUWASA Deputy Chief of Party (DCOP) will provide technical project oversight and ensure achievement of expected results, while the Chief of Party will hold responsibility for programmatic oversight. The DCOP may assign one of the technical team members to work directly on the project. Additional support for M&E and documentation of the results will be provided by other SUWASA Nairobi office staff as required. The DCOP will participate in an initial project start meeting with NWASCO and the Ministry of Local Government and Housing as appropriate. All communications and reporting to USAID EGAT will be done by the SUWASA Nairobi Team, based upon results of the project in Zambia. The timing of all deliverables and outputs will be specified in the Inception Report, which will include the PMP.

8.0 PROJECT IMPLEMENTATION PLAN

8.1 MONITORING AND EVALUATION PLAN

The SUWASA Deputy Chief of Party and SUWASA Monitoring and Evaluation Specialist, will prepare a Performance Management Plan (PMP) as part of the first Inception Report in the first 60 days of the project (for the first two components of the project). The PMP will specify expected SUWASA results-outputs, outcomes and impact; indicators for measuring results; proposed targets; and monitoring periods and documentation required for performance audits and evaluations. The PMP will become an integral part of the Life of Project Work Plan to be approved by USAID/EGAT.

8.2 ENVIRONMENTAL COMPLIANCE MONITORING

The nature of support to be provided by SUWASA to the Government of Zambia through NWASCO, the CUs and the MLGH will be technical assistance and capacity building only. As part of SUWASA support, it is unlikely that there will be need for commodity procurements (e.g., computers, MIS software, etc.) nor infrastructure investment or rehabilitation. Therefore, an Environmental Assessment under USAID environmental requirements (22 CFR 216) is not required. However, SUWASA will include recommendations for environmental oversight in guidelines and other deliverables that SUWASA prepares under the project.

8.3 REPORTING ON PROJECT PROGRESS

The Regional Office in Nairobi will provide the following reports:

- Two inception reports including key findings and recommendations regarding initial investigations into each of the threer initiative components, a summary of the results of any Stakeholder Action Planning / Inception Workshop, an updated Work Plan and PMP.
- Monthly and quarterly reports, including a narrative on the reporting period, discussing actual
 project progress vis-à-vis planned activities and agreed project schedules, project
 administration and management issues, challenges in project implementation, planned
 activities for the subsequent reporting period, and a financial resource utilization report;
- Final Report, including all activities performed, results achieved and resources used. The Final Report will also include a thorough analysis of established performance indicators.

9.0 RESOURCE TABLE

9.1 IMPLEMENTATION PLAN

Below is a draft implementation plan for the Zambia project. The plan assumes an August 1 2012 start-up.

9.2 PROJECT IMPLEMENTATION PLAN

Below is a draft implementation plan for the Zambia project

9.2.1 Table 2: Implementation Plan

Objectives and Activities		Q1	1 Q2			Q3				Q4		Yr 2 -0		5	Yr 2 -Q5		5	Q6	
		Α	S	0	N	D	J	F	M	Α	M	J	J	Α	S	0	N	D	J
Objective 1: Determination of optimum cost of v	vater																		
Activity 1: Inception phase																			
1.1 Meeting with NWASCO, Selected CUs, MLGH to introduce the project																			
1.2 Draft inception report																			
Activity 2: Optimum cost of water																			
2.2.1 Review current cost categories																			
2.2.2 Compile the cost categories for each CU																			
2.2.3 Develop Uniform Cost Categories for future use by all CUs																			
2.2.4 Consensus and approval from NWASCO																			
2.2.5 Estimate current costs in each Uniform Cost Category for CUs																			
Activity 3: Cost Structure Analysis:																			
2.3.1 Assignment of cost categories to fixed, variable, and mixed costs for CUs																			
2.3.2 Construct model to determine the average and marginal costs for CUs																			
2.3.3 Develop a model to be used in arriving at the optimum cost structure																			
2.3.4 Develop average and marginal cost curves for each CUs																			
2.3.5 For each CU determine the cost of service																			
2.3.6 Internal benchmarking/comparison of 11 CUs																			

Objectives and Activities	Q1		Q2				Q3			Q4		Yr 2 -Q5			Yr 2 -Q5			Q6	
		Α	S	0	N	D	J	F	M	Α	M	J	J	Α	S	0	N	D	J
Objective 3: Development of tariff model	•									•									
Activity 1: Tariff Model development																			
3.1.1 Undertake an assessment of the appropriateness of the current tariff structure																			
3.1.2 Determine the current and prospective cost structures																			
3.1.3 Assess as whether there is opportunity for consolidation or restructuring of the current tariff structure																			
3.1.4 Determine consumption profile for each customer class																			
3.1.5 Develop tariff under this study versus the existing tariffs																			
3.1.7 Develop a tariff model to be used in assessing and approving of tariff applications from the CUs																			
3.1.8 Train inspectorate at NWASCO –on the use of the proposed tariff model																			
Objective 4: Corporate Governance																			
4.1 Analyze current corporate governance guidelines																			
4.2 In consultation with NWASCO identify any gaps to be filled																			
4.3 Update and revise the corporate governance																			
4.4 Hold stakeholder workshop to present recommended updates to revised guidance																			
4.5 Training and capacity building on the revised corporate governance guidelines																			